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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,039	07/21/2003	Sheila F. Kia	GP-301493 (8540R-000005)	6370

7590 02/15/2006

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EXAMINER

GORR, RACHEL F

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,039

Applicant(s)

KIA ET AL.

Examiner

Rachel F. Gorr

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 27-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25, 27-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Art Unit: 1711

1. Claims 15-18 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 15-17 no longer further limit claim one because already contains these limitations. Claim 18 is now broader in scope than claim one, which is limited to monomers selected from a groups consisting of only two monomers.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-25 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over McBain in view of Bristowe, Craven, Sadvary and Boisseau.

McBain discloses gel coats (col. 10, lines 24-30) comprising acrylate and styrene diluents and a polyester urethane acrylate gel coat resin (see Recipes A and B). In col. 3, line 11, he shows preferring Craynor CN 963 as the resin. Strauss (bottom col. 6 – top col. 7) shows that Craynor 963 comprises a polyester having a number average molecular weight of 1500-2500, an aliphatic polyisocyanate, such as isophorone diisocyanate, and a hydroxyl acrylate. He teaches mole ratios of diisocyanate/hydroxyalkyl acrylate/polyester diol of about 2/2/1, and he shows the polyester made from adipic acid (col. 6, line 57), hexane diol (col. 6, line 64) and neopentyl glycol (col. 6, line 67). McBain uses pigments in Recipe B, and he discloses

difunctional and trifunctional diluents, such as propoxylated glyceryl triacrylate (col. 4, line 43). In recipes A and B, the gel coat resin comprises between 30 and 40 wt. % of the gel coat. McBain shows benzotriazole and hindered amine light stabilizers (top col. 5). McBain differs from the claims by reacting the polyester urethane acrylate ingredients in a different order, by showing the triacrylate diluent as optional, and by not specifying the combination of benzotriazole and hindered amine stabilizers.

4. Bristowe discloses three methods for making polyester acrylate urethanes (bottom col. 5 – top col. 6). He teaches that the method of blending the polyester and hydroxyalkyl acrylate before reaction with diisocyanate is the preferable method because it allows for better control of the exothermic reaction, and minimizes the formation of by-products.

5. Craven teaches (col. 8, lines 10-30) that a combination of hindered amine and benzotriazole stabilizers exhibit a synergy in acrylate coatings. Sadvary and Boisseau both show, in their coating examples, a combination of Tinuvin 928 and 123.

6. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the method and product produced by Bristowe in the invention of McBain to minimize the formation of by-products. It would have been obvious to use a combination of benzotriazole and hindered amine stabilizers because Craven shows the combination better than hindered amine alone, and Sadvary and Boisseau show the combination well known in the art. It would have been obvious for McBain to include the optional triacrylate diluent in the coating in order to increase crosslinking, which would make a harder and more solvent resistant coating.

Art Unit: 1711

7. Applicant's arguments filed 1-12-06 have been fully considered but they are not persuasive. The applicants argue that their polyester urethane acrylate has a different structure than CRAYNOR. Bristowe teaches and shows the advantages of the process and product made by the process of the claims. The applicants argue that McBain doesn't teach a combination of difunctional and trifunctional diluents. It would have been obvious to include the trifunctional diluents disclosed as optional by McBain in order to increase the crosslinking.

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel F. Gorr whose telephone number is 571-272-1072. The examiner can normally be reached on Mon., Tues., Thurs., Fri., from 7:00 AM to 5:30 PM.

Art Unit: 1711

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R.G.
February 10, 2006


RACHEL GORR
PRIMARY EXAMINER